

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"20050078761"	US-PGPUB; USPAT	OR	ON	2007/01/17 08:58
S3	1	("6185258").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/10 09:26
S4	18	("3978408"   "4001692"   "4099121"   "4369516"   "4567464"   "4763331"   "5029185"   "5088113"   "5101501"   "5109390"   "5283870"   "5319667"   "5416797"   "5442627"   "5457712"   "5461646"   "5499272"   "5848103").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/10 16:46
S5	41	("6185258").URPN.	USPAT	OR	ON	2006/10/10 16:52
S6	16	("5425050"   "5457712"   "5506861"   "5815488"   "5848103"   "5862192"   "5933421"   "6014570"   "6064662"   "6118810"   "6128330"   "6141393"   "6144711"   "6151328"   "6185258"   "6198775").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/11 10:44
S7	13	("6377632").URPN.	USPAT	OR	ON	2006/10/11 10:50
S8	12	("6442214").URPN.	USPAT	OR	ON	2006/10/11 10:58
S9	24	("3633107"   "4489418"   "4520490"   "4597090"   "4945549"   "5029185"   "5305353"   "5396518"   "5406585"   "5418798"   "5479448"   "5652764"   "5659578"   "5737365"   "5796788"   "5844951"   "5867478"   "6034996"   "6058105"   "6097771"   "6144711"   "6178196"   "6185258"   "6452981").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/11 11:05
S10	4	("6661856").URPN.	USPAT	OR	ON	2006/10/11 11:07
S11	24	("3633107"   "4489418"   "4520490"   "4597090"   "4945549"   "5029185"   "5305353"   "5396518"   "5406585"   "5418798"   "5479448"   "5652764"   "5659578"   "5737365"   "5796788"   "5844951"   "5867478"   "6034996"   "6058105"   "6097771"   "6144711"   "6178196"   "6185258"   "6452981").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/11 11:11

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S12	67	("3633107"   "3978408"   "4001692"   "4099121"   "4369516"   "4567464"   "4577332"   "4675880"   "4733402"   "4763331"   "4953183"   "5022053"   "5029185"   "5088113"   "5101501"   "5109390"   "5170413"   "5202903"   "5283780"   "5305353"   "5319677"   "5396518"   "5416797"   "5418798"   "5442627"   "5457712"   "5461646"   "5461696"   "5479448"   "5481572"   "5499272"   "5553102"   "5675590"   "5790570"   "5848103"   "5859870"   "5933421"   "5943372"   "5949833"   "5960039"   "5991331"   "6031474"   "6034987"   "6038263"   "6088408"   "6094465"   "6097771"   "6115427"   "6144711"   "6154485"   "6173005"   "6178196"   "6185258"   "6185266"   "6188736"   "6298082"   "6304581"   "6317411"   "6317466"   "6327299"   "6377631"   "6393074"   "6470043"   "6501803"   "6542556"   "6549585"   "6741635").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/11 12:44
S13	259	transmit\$6 near2 complex near2 symbol\$3	US-PGPUB; USPAT	OR	ON	2006/10/11 12:45
S14	4003	code near2 matrix	US-PGPUB; USPAT	OR	ON	2006/10/11 12:46
S15	483	linearly near2 mix\$4	US-PGPUB; USPAT	OR	ON	2006/10/11 12:47
S16	0	substantually near2 orthogonal near2 signal\$3	US-PGPUB; USPAT	OR	ON	2006/10/11 12:48
S17	8352	orthogonal near2 signal\$3	US-PGPUB; USPAT	OR	ON	2006/10/11 12:48
S18	296	three near4 transmit near2 antenna	US-PGPUB; USPAT	OR	ON	2006/10/11 12:49
S19	13	S13 same S14	US-PGPUB; USPAT	OR	ON	2006/10/11 12:50
S20	1	S15 and S17 and S18 and S19	US-PGPUB; USPAT	OR	ON	2006/10/11 12:51
S21	1	S15 and S19	US-PGPUB; USPAT	OR	ON	2006/10/11 12:51
S22	8	S19 and S18	US-PGPUB; USPAT	OR	ON	2006/10/11 12:52
S23	5	("6865237").URPN.	USPAT	OR	ON	2006/10/11 13:08

## EAST Search History

S24	1	"20050123085"	US-PGPUB; USPAT	OR	ON	2006/10/11 17:06
S25	1	"20050084044"	US-PGPUB; USPAT	OR	ON	2006/10/12 13:39
S26	16	"6304618"	US-PGPUB; USPAT	OR	ON	2006/10/12 13:40
S27	16	"6304618"	US-PGPUB; USPAT	OR	ON	2006/10/12 13:40
S28	1	("6304618").PN.	US-PGPUB; USPAT	OR	OFF	2006/10/12 13:40
S29	1	"20050084044"	US-PGPUB; USPAT	OR	ON	2006/10/12 16:25
S30	75	HOTTINEN\$-ARI.inv.	US-PGPUB; USPAT	OR	ON	2007/01/04 15:33
S31	1	("2793363").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/04 15:33
S32	264	transmit\$6 near2 complex near2 symbol\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 13:04
S33	4164	code near2 matrix	US-PGPUB; USPAT	OR	ON	2007/01/07 13:04
S34	13	S32 same S33	US-PGPUB; USPAT	OR	ON	2007/01/07 14:00
S35	1	transmit\$5 near5 (code adj1 matrix) same linearly adj1 mix\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 14:42
S36	1	transmit\$5 near5 (code adj2 matrix) same linearly adj2 mix\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 14:42
S37	1	transmit\$5 near5 (code adj2 matrix) same linearly near3 mix\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 14:43
S38	1	transmit\$5 near5 (code adj2 matrix) same mix\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 14:43
S39	113	transmit\$5 near5 (code adj2 matrix)	US-PGPUB; USPAT	OR	ON	2007/01/07 14:46
S40	14650	matrix near5 mix\$3	US-PGPUB; USPAT	OR	ON	2007/01/07 14:45
S41	2	S39 and S40	US-PGPUB; USPAT	OR	ON	2007/01/07 14:46
S42	1261196	transmit\$5 near5 (code adj2 matrix) same parallel near5 orthogonal near2 signal same antenna or path	US-PGPUB; USPAT	OR	ON	2007/01/07 14:57
S43	461	375/299 and S42	US-PGPUB; USPAT	OR	ON	2007/01/07 14:49
S44	0	transmit\$5 near5 (code adj2 matrix) same parallel near5 orthogonal near2 signal same (antenna or path)	US-PGPUB; USPAT	OR	ON	2007/01/07 14:58

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S45	113	transmit\$5 near5 (code adj2 matrix)	US-PGPUB; USPAT	OR	ON	2007/01/07 14:59
S46	26	parallel near5 orthogonal near2 signal same (antenna or path)	US-PGPUB; USPAT	OR	ON	2007/01/07 14:58
S47	0	S45 and S46	US-PGPUB; USPAT	OR	ON	2007/01/07 14:58
S48	1	transmit\$5 near5 (code adj2 matrix) same mix\$3 same antenna	US-PGPUB; USPAT	OR	ON	2007/01/07 14:59
S49	31	transmit\$5 near5 (code adj2 matrix) same antenna	US-PGPUB; USPAT	OR	ON	2007/01/07 15:29
S50	6	("6088408"   "6097771"   "6178196"   "6317411"   "6317466"   "6631168").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/07 15:09
S51	4	("6834043").URPN.	USPAT	OR	ON	2007/01/07 15:23
S52	4	transmit\$5 near5 (code adj2 matrix) same three near2 antenna	US-PGPUB; USPAT	OR	ON	2007/01/07 16:17
S53	675	375/299	US-PGPUB; USPAT	OR	ON	2007/01/07 15:30
S54	113	transmit\$5 near5 (code adj2 matrix)	US-PGPUB; USPAT	OR	ON	2007/01/07 16:27
S55	5	S53 and S54	US-PGPUB; USPAT	OR	ON	2007/01/07 16:26
S56	1225	code adj1 matrix	US-PGPUB; USPAT	OR	ON	2007/01/07 16:27
S57	18	S53 and S56	US-PGPUB; USPAT	OR	ON	2007/01/07 16:27
S58	6	("20030228850"   "20040141566"   "20050220211"   "20050243942"   "20060120476"   "6351499").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/07 16:57
S59	12	("5592490"   "5642353"   "5815488"   "5828658"   "5933421"   "6058105"   "6064662"   "6067290"   "6097771"   "6108565"   "6144711"   "6175550").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/07 16:58
S60	7	("5940439"   "5991273"   "6351499"   "6373832"   "6377632"   "6594473"   "6728307").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/07 17:02
S61	9	("20030013468"   "20030058926"   "20040008760"   "20040223554"   "4873724"   "6298095"   "6307882"   "6473393"   "6600776").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/07 17:59
S62	130	convert\$3 near3 stream near3 complex	US-PGPUB; USPAT	OR	ON	2007/01/09 16:00
S63	1596	code near matrix and length	US-PGPUB; USPAT	OR	ON	2007/01/09 15:53

## EAST Search History

S64	307	code near matrix and length same linear	US-PGPUB; USPAT	OR	ON	2007/01/09 15:53
S65	0	S62 and S64	US-PGPUB; USPAT	OR	ON	2007/01/09 15:53
S66	76	"6185258"	US-PGPUB; USPAT	OR	ON	2007/01/09 16:19
S67	1	("6185258").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/09 16:53
S68	2	linear near3 transformat\$3 same (different or dissimilar or unlike) near4 identity	US-PGPUB; USPAT	OR	ON	2007/01/09 17:08
S69	2	linear near5 transformat\$3 same (different or dissimilar or unlike) near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/09 16:57
S70	0	linear near5 transformat\$3 same (dissimilar or unlike) near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/09 16:58
S71	1	linear near5 transformat\$3 near5 different near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/09 17:00
S72	10	linear near5 transformat\$3 near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/09 17:01
S73	74	linear near5 transformat\$3 same identity	US-PGPUB; USPAT	OR	ON	2007/01/09 17:02
S74	9	linear near5 transformat\$3 same identity same different	US-PGPUB; USPAT	OR	ON	2007/01/09 17:02
S75	216820	(linear with identity(transformat\$3))	US-PGPUB; USPAT	OR	ON	2007/01/09 17:20
S76	138	code near2 matrix near4 orthogonal	US-PGPUB; USPAT	OR	ON	2007/01/09 17:25
S77	42	S75 and S76	US-PGPUB; USPAT	OR	ON	2007/01/09 17:11
S78	30	(linear with identity with transformat\$3)	US-PGPUB; USPAT	OR	ON	2007/01/09 17:21
S79	1	S76 and S78	US-PGPUB; USPAT	OR	ON	2007/01/09 17:21
S80	0	("linearnear5transformat\$3near5differentnear5identity").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/10 09:28
S81	14	linearnear5 transformat\$3 near5 different near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/10 09:37
S82	1	linear near5 transformat\$3 near5 different near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/10 09:29
S83	25	linear same transformat\$3 same different same identity	US-PGPUB; USPAT	OR	ON	2007/01/10 09:52
S84	44	linear same (transformat\$3 or operator) same different same identity	US-PGPUB; USPAT	OR	ON	2007/01/10 09:58

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S85	3	linear near5 (transformat\$3 or operator) near5 different near5 identity	US-PGPUB; USPAT	OR	ON	2007/01/10 09:59
S86	0	martix near4 linear adj2 transformat\$3 same transmit near3 diversity	US-PGPUB; USPAT	OR	ON	2007/01/10 11:17
S87	0	martix near4 linear adj2 transformat\$3	US-PGPUB; USPAT	OR	ON	2007/01/10 11:14
S88	1	matrix near4 linear adj2 transformat\$3 same transmit near3 diversity	US-PGPUB; USPAT	OR	ON	2007/01/10 11:18
S89	1	matrix near4 linear adj2 (transformat\$3 or operator) same transmit near3 diversity	US-PGPUB; USPAT	OR	ON	2007/01/10 11:19
S90	212	matrix near4 linear adj2 (transformat\$3 or operator)	US-PGPUB; USPAT	OR	ON	2007/01/10 11:19
S91	1	375/299 and S90	US-PGPUB; USPAT	OR	ON	2007/01/10 11:20
S92	677	375/299	US-PGPUB; USPAT	OR	ON	2007/01/10 11:20
S93	1014	transmi\$5 adj matrix	US-PGPUB; USPAT	OR	ON	2007/01/11 14:31
S94	199	S93 and diversity	US-PGPUB; USPAT	OR	ON	2007/01/11 14:50
S95	92	S94 and (OFDM or multi adj1 channel)	US-PGPUB; USPAT	OR	ON	2007/01/11 15:32
S96	153	S93 and (OFDM or multi adj1 channel)	US-PGPUB; USPAT	OR	ON	2007/01/11 15:40
S97	1	"20050058221"	US-PGPUB; USPAT	OR	ON	2007/01/11 17:58
S98	15	(complex near5 symbols) same ( serial-to-parallel adj2 conversion)	US-PGPUB; USPAT	OR	ON	2007/01/16 18:06
S99	15	(complex near5 symbols) same ( serial-to-parallel adj2 conversion)	US-PGPUB; USPAT	OR	ON	2007/01/16 15:09
S10 0	6	("5345439"   "5953344"   "6061407"   "6370153"   "6469991"   "6567416").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/16 15:07
S10 1	157	(symbol\$2) same ( serial-to-parallel adj2 conversion)	US-PGPUB; USPAT	OR	ON	2007/01/16 15:10
S10 2	88	(symbol\$2) with ( serial-to-parallel adj2 conversion)	US-PGPUB; USPAT	OR	ON	2007/01/16 15:10
S10 3	1	(code near3 matrix) near5 different same symbol near2 rate and dimension\$1 and power	US-PGPUB; USPAT	OR	ON	2007/01/16 17:32

## EAST Search History

S10 4	3	matrix near5 different near5 symbol near2 rate	US-PGPUB; USPAT	OR	ON	2007/01/16 17:43
S10 5	350	matrix same symbol near2 rate	US-PGPUB; USPAT	OR	ON	2007/01/16 17:46
S10 6	1016	transmi\$5 adj matrix	US-PGPUB; USPAT	OR	ON	2007/01/17 08:58
S10 7	55763	"1" and diversity	US-PGPUB; USPAT	OR	ON	2007/01/17 08:59
S10 8	200	S106 and diversity	US-PGPUB; USPAT	OR	ON	2007/01/17 08:59
S10 9	2812	orthogonal near5 signal\$3 same (non-overlapping adj time adj slots or different OFDM adj subcarriers or different adj wavelet adj waveforms)	US-PGPUB; USPAT	OR	ON	2007/01/17 10:09
S11 0	27	S109 and transmi\$5 adj matrix	US-PGPUB; USPAT	OR	ON	2007/01/17 10:09
S11 1	19	S110 and diversity	US-PGPUB; USPAT	OR	ON	2007/01/17 11:24
S11 2	1	transmi\$5 adj matrix near5 (4x4)	US-PGPUB; USPAT	OR	ON	2007/01/17 12:26
S11 3	1	("6185258").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/17 12:26
S11 4	18	("3978408"   "4001692"   "4099121"   "4369516"   "4567464"   "4763331"   "5029185"   "5088113"   "5101501"   "5109390"   "5283870"   "5319667"   "5416797"   "5442627"   "5457712"   "5461646"   "5499272"   "5848103").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/17 12:28
S11 5	3	(transmission adj code adj matrix) same ((two or multiple or three) near3 matrix or matrices)	US-PGPUB; USPAT	OR	ON	2007/05/31 16:02
S11 6	351	(two or multiple or three) with (code adj (matrix or matrices))	US-PGPUB; USPAT	OR	ON	2007/05/31 16:10
S11 7	3	S116 and (linear adj transformation\$1)	US-PGPUB; USPAT	OR	ON	2007/05/31 16:11
S11 8	1	(diversity) near5 (code adj matric\$2) same (transmission)	US-PGPUB; USPAT	OR	ON	2007/07/02 16:29
S11 9	1	(code adj matric\$2) near5 linear same diversity	US-PGPUB; USPAT	OR	ON	2007/07/02 16:30
S12 0	17	(matric\$2) near5 linear same diversity	US-PGPUB; USPAT	OR	ON	2007/07/02 16:39
S12 1	82	HOTTINEN\$-ARI.inv.	US-PGPUB; USPAT	OR	ON	2007/07/02 17:24

## EAST Search History

S12 2	1	(transmit adj diversity) same (dimension) same (different adj streams)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:27
S12 3	2	(diversity) same (dimension) same (different adj streams)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:27
S12 4	2251	(modulat\$3) same (stream) same (conversion)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:29
S12 5	1	(modulat\$3) same (different adj stream) same (conversion)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:30
S12 6	46	(modulat\$3) same (different adj stream)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:30
S12 7	3	S126 and (375/267)	US-PGPUB; USPAT	OR	ON	2007/07/02 17:30